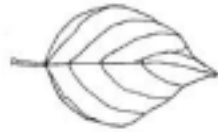


Common Shrubs of Minnesota Valley

Dogwood

Cornus, sp. - At least 4 species occur here, all with egg-shaped, toothless leaves that are opposite on the twigs. The most noticeable is Red-osier (*C. stolonifera*) with its dark red branches and twigs.



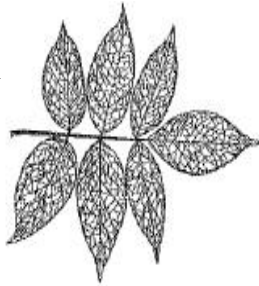
Bush Honeysuckle

Lonicera, sp. - Bush honeysuckle can be quite common in open areas and wood edges. Clusters of white or pink flowers occur in late spring.



Elder

Sambucus, sp. - Two species, Red-berried (*S. pubens*) and American (*S. canadensis*) are fairly common in clearings and forest edges. Both have large clusters of white flowers and (later) berries. Red-berried blooms in the spring and has red berries; American blooms in mid-summer and has blackish berries.



Gooseberry/Currant

Ribes, sp. - As many as 6 species occur at the Refuge. Many are spiny plants, and all are shrubby with lobed leaves. Greenish-yellow flowers form in the spring.



Wild Plum/Cherry

Prunus, sp. - Plums (larger single or paired fruits) and cherries (small fruits in clusters) are numerous at the Refuge, and often difficult to distinguish. Although some are tree-sized, many are shrubby. Fruits have one large pit or stone, and are either round and smooth (cherries) or round with a furrow down the side (plums).



Serviceberry

Amelanchier, sp. - Similar to their cousins the cherries/plums, these can be told by the presence of 3-5 seeds inside the fruits, instead of 1 large pit.



Hawthorn

Crataegus, sp. - Shrubs or small, crooked trees, these have long, straight or slightly-curved thorns. Clusters of white flowers in spring produce dark red fruits. Fruits have one large pit or stone.



Non-native species:

Buckthorn

Rhamnus cathartica - This is a troublesome, naturalized species, that is unfortunately quite common and widespread. It often forms thickets of spindly, tree-like shrubs, with branch tips often ending in thorns and a profusion of black berries. The Refuge is undertaking eradication programs to help control its spread.



Minnesota Valley National Wildlife Refuge
3815 American Boulevard East
Bloomington, MN 55425-1600
952/854 5900

Minnesota Valley's website address:
<http://midwest.fws.gov/minnesotavalley>

U.S. Fish & Wildlife Service
1 800/344 WILD (9453)
<http://www.fws.gov>

Deaf/hard of hearing individuals may reach
Minnesota Valley NWR through the Federal
Information Relay System at 1 800/877 8339

Available in alternative formats upon request.



U.S. Fish & Wildlife Service

Minnesota Valley National Wildlife Refuge Trees and Shrubs



A note about non-native species: Non-native species are those introduced to environments where they previously did not occur. Although some are unobtrusive and rarely spread, many are invasive and become environmental problems. Some, like Common Buckthorn, spread rapidly and take over habitats, competing with the native species and sometimes replacing them. Programs to eradicate these species are being conducted at the Refuge.

*Diverse Habitats/
Diverse Species*

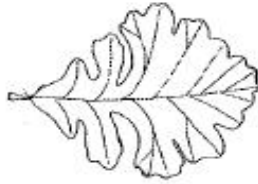
Minnesota Valley National Wildlife Refuge encompasses a large and diverse area of the Minnesota River Valley, featuring tallgrass prairie, marshes and lakes, and riparian habitats. Three major forest vegetation types are also represented at the refuge:

Oak Savannah - a rare and disappearing feature, this is typified by an overstory of bur oak, with an understory of native tallgrass prairie. Remnant and re-established pockets can be

observed in the Louisville Swamp and Rapids Lake Units.

Northern Floodplains Forest - all Refuge units feature this type, where cottonwood, willow, and elm occur in tall stands in the river bottoms.

Maple-Basswood Forest - occurring on slopes and ravines along the Minnesota River valley, this association can best be observed in Long Meadow Lake and Rapids Lake units.



Bur Oak

Quercus macrocarpa - One of the most common species in the Refuge, it can be told by its broccoli-shaped leaves and fringed acorn caps.



Eastern Redcedar

Juniperus virginiana - This evergreen is common, especially on ridges and slopes. There are separate male and female plants, with the females producing bluish berry-like cones.



Black Cherry

Prunus serotina - This is a medium-to-large tree. Its leaves are dark green, smooth, and very shiny on top. Bark has squarish plates with reddish inner bark underneath. Fruit are blackish berries in elongated clusters.



Prickly Ash

Zanthoxylum americanum - Thickets of this species occur on slopes throughout the Refuge. Thorns are present on the branches and trunk. Crushed leaves have a citrus odor.

Bitternut Hickory

Carya cordiformis - Our only common hickory is found in river bottoms and on slopes. It has a smooth gray trunk and can be identified even in winter by its bright yellow buds.



Sumac

Rhus, sp. - Staghorn (*R. typhina*) and Smooth (*R. glabra*) are both equally common, forming thickets along forest edges and overgrown fields. Smooth lacks the hairy twigs of Staghorn. Both species produce large clusters of small reddish berries.



Green Ash

Fraxinus pennsylvanica - Common and widespread, this species can attain large size in the river bottoms. It has opposite branching and ridges on the bark that form x's.



Boxelder

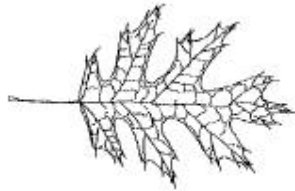
Acer negundo - Actually a maple, this often gnarly tree grows as either a male or female, with the latter forming winged seeds. Its leaflets are either in 3s or 5s.



Common Trees of Minnesota Valley

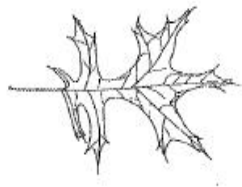
Northern Red Oak

Quercus rubra - Named for its fall leaf color, the red oak is fairly common on wooded slopes and ridges. Its acorn caps are flat, saucer-shaped.



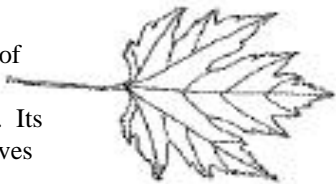
Northern Pin Oak

Quercus ellipsoidalis - Uncommon on Refuge uplands, the northern pin can be told from the red oak by its narrower leaf lobes and cup-shaped acorn caps.



Silver Maple

Acer saccharinum - Fond of low, wet areas, this tree is abundant in river bottoms. Its bark is shaggy, and its leaves are whitened underneath.



Sugar Maple

Acer saccharum - Sugar maples grow on ridges and in ravines. Bark on older trees is scaly and ridged, often black in patches. Leaves are green below.



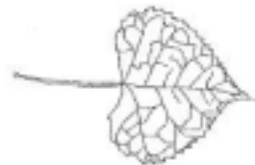
Aspen

Populus tremuloides or *grandidentata* - Both quaking and bigtooth aspen occur here. Both have white trunks and often grow in clumps. Quaking aspen leaves lack the large teeth of bigtooth aspen.



Eastern Cottonwood

Populus deltoides - Relatives of aspen, these typically grow in river bottoms, where they can attain large size. Female trees produce the "cotton" from flower capsules.



American Basswood

Tilia americana - Also known as Linden, basswood is an important component of upland forest. Leaves are broad and heart-shaped. Clusters of fragrant flowers are produced in June. Buds are bright red.



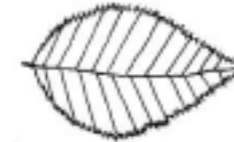
Willow

Salix, sp. - Numerous species occur in the refuge, but most are shrubby. All native species prefer low, wet habitats, and most have long, narrow leaves. Among those that become large trees are the Black, Peachleaf, and the non-native Weeping.



Ironwood

Ostrya virginiana - Also known as Hop-hornbeam, this small tree is abundant on slopes, ridges, and ravines. Its leaves last well through the winter, when its light brown leaves make the species easy to find in the woods.



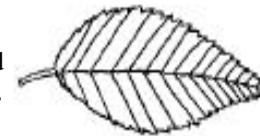
American Elm

Ulmus americana - Found throughout the Refuge in a variety of habitats, this elm has marbled bark and doubly-toothed leaves.



Siberian Elm

Ulmus pumila - This naturalized species is quite common. It has solid gray bark and singly-toothed leaves. Its growth form is normally scraggly.



Hackberry

Celtis occidentalis - Widespread and fairly common, this species can be told by its warty bark. Its leaves are teardrop-shaped, with uneven bases. Unlike its cousin the elm, its fruit is a small berry.

